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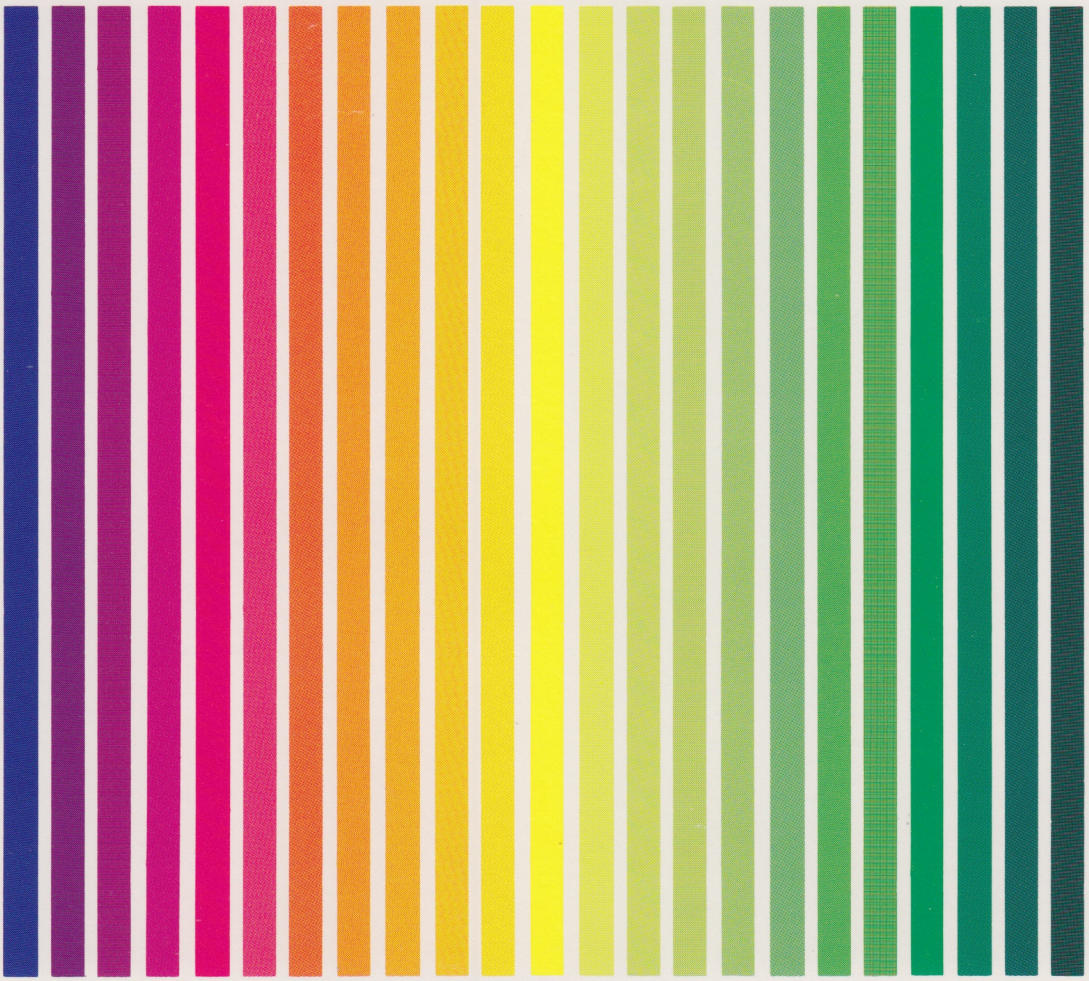

Elizabeth Chase MacRae

MANKALA

A computerized version of the African
stone-and-board game for 1-2 players (ages 8 and up)

Cassette: 16K (APX-10156) Diskette: 16K (APX-20156)

User-Written Software for ATARI Home Computers

MANKALA

by

Elizabeth Chase MacRae

Program and Manual Contents © 1982 Elizabeth Chase MacRae

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INTRODUCTION

OVERVIEW

The stone age has met the computer age! Mankala, an ancient African game traditionally played with stones on the ground or on a hand-carved board, is now available on your ATARI Home Computer. But the computerized MANKALA remains faithful to the original game's rules and format.

Two players can compete against each other or one player can challenge the computer at different levels of difficulty. Each player owns six small playing bins and one large home bin, which are arranged as two parallel sets. Start MANKALA with anywhere between three an eight stones per bin. Players take turns picking up all the stones in one of their playing bins and dropping one stone in each bin in a counterclockwise direction. They move the stones by using a Joystick Controller to position their marker over a bin and then pressing the red joystick button. MANKALA automatically picks up all the stones and drops them in the other bins. Each stone dropped into a home bin remains there permanently, and whenever the last stone in a turn lands in the player's home bin, the player takes another turn. The game ends when one player empties all the playing bins in his set, and the holder of more stones is the winner.

REQUIRED ACCESSORIES

One ATARI Joystick Controller per player

Cassette version

16K RAM
ATARI 410 Program Recorder

Diskette version

16K RAM
ATARI 810 Disk Drive

GETTING STARTED

LOADING MANKALA INTO COMPUTER MEMORY

1. Remove any program cartridge from the cartridge slot of your computer.

2. In a one-player game, plug your Joystick Controller into the first (the leftmost) controller jack at the front of your computer console. In a two-player game, plug your Joystick Controller into the first and second (the two leftmost) controller jacks at the front of your computer console.

3. If you have the cassette version of MANKALA:

   a. Have your computer turned OFF.

   b. Insert the MANKALA cassette into the program recorder's cassette holder and press REWIND on the recorder until the tape rewinds completely. Then press PLAY to prepare the program recorder for loading the program.

   c. Turn on the computer while holding down the START key.

   d. When you hear a beep, release the START key and press the RETURN key. The program will load into computer memory. Turn on your TV set. The program will start automatically.

If you have the diskette version of MANKALA:

   a. Have your computer turned OFF.

   b. Turn on your disk drive.

   c. When the BUSY light goes out, open the disk drive door and insert the MANKALA diskette with the label in the lower right-hand corner nearest to you. (Use disk drive one if you have more than one drive.)

   d. Turn on your computer and your TV set. The program will load into computer memory and start automatically.

THE FIRST DISPLAY SCREEN

The first display screen contains the word "MANKALA" and instructions to press the START or OPTION keys.

PLAYING MANKALA

SELECTING YOUR OPTIONS

One person can play MANKALA against the computer with four increasingly difficult levels of competition. Or, two players can compete. In the one-player version, press the OPTION key until you see the desired playing level on the screen.

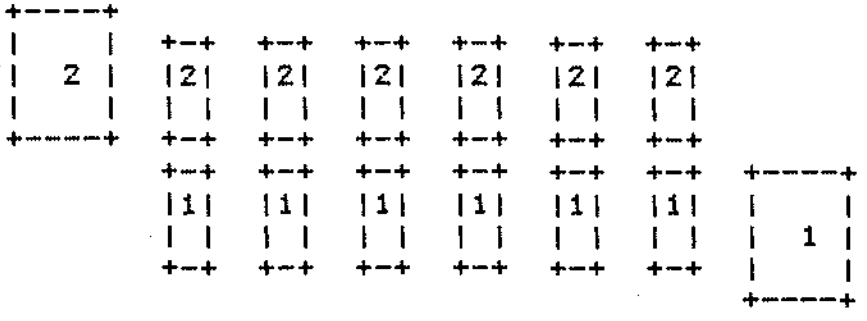
WARNING: At the higher levels of one-player competition, the computer will spend a noticeable amount of time planning its move. At level four, for example, you may have to wait up to 15 seconds for some moves.

After you set your options, press the START key to go on to the playing field.

If you do not press the START key within a minute, the computer will begin to play against itself, using randomly selected levels of skill.

PLAYING FIELD

The playing field consists of six regular bins and one large home bin for each player as shown below.



Player one's bins are labelled "1" and player two's bins are labelled "2".

Player 1 uses the Joystick Controller plugged into the first controller jack , and Player 2 uses the Joystick Controller in the second jack.

CHOOSING THE NUMBER OF STONES

The regular bins each contain three stones to start. You may increase this number to eight by pressing the SELECT key repeatedly. More stones create a more difficult game.

When the computer plays against itself, the humber of stones is chosen randomly.

STARTING THE GAME

After you select the type of game and the number of stones you wish to play with, press the START key to allow player 1 to go first or press the OPTION key to allow player 2 to

MAKING A MOVE

As the game begins, a blinking cursor moves onto the playing field. The second cursor appears after the first move is made.

Use your Joystick Controller to move your cursor from side to side over you regular bins. Press the red Joystick button to select one of your bins of stones. The cursor automatically picks up the stones in that bin and distributes them. You can move your cursor only when it is blinking, indicating that it's your turn.

You cannot position the cursor partway between your bins or too far to the right or left. A buzzer sounds if you try to move your cursor too far or if you select a bin with no stones in it.

GAME RULES

On each turn, select one of the bins of stones. Then:

1. The cursor picks up all the stones in the selected bin and drops them, one by one in a counter-clockwise direction into all the regular bins (including those of your opponent) and into your home bin.

2. If the last stone dropped lands in your home bin, then you have another turn and your cursor continues to blink.

3. If the last stone dropped lands in one of your empty bins, then you "capture" all your opponent's stones in the bin immediately opposite. The cursor will automatically pick them up and put them in your home bin.

The game ends when the player whose turn it is has no stones left to move. The player with more stones, including those in the home bin and in the regular bins, is the winner. To simplify scoring, MANKALA automatically picks up all stones remaining in the regular bins at the end of the game and puts them into the appropriate home bin.

COUNTING THE STONES

Part of the challenge of MANKALA is counting the number of stones in each bin, especially when there are more than just a few. When you play the game with real stones, the rules allow that a player may look at a pile of stones from any angle but may not touch them or move them to count.

In your computer version of MANKALA, the counting is easier because the stones appear in clumps of not more than 10 stones. Thus if you have 12 stones in a bin, they will appear as a clump of 10 and a clump of 2.

If you wait more than one minute before starting a new game, the computer begin playing

against itself.

RESTARTING THE GAME

You can restart the game at any time by pressing the SYSTEM RESET key.

HINTS

A good initial strategy is to move the stones nearest your home bin unless there's an obvious opportunity for a "capture". You can also pick up some good ideas by watching the computer play against itself. More sophisticated strategies include captures, and defensive stone-counting moves to avoid capture.

QUICK REFERENCE SHEET

BEFORE GAME BEGINS USE:

OPTION key	To choose the level of competition
START key	To begin the game
WAIT ONE MINUTE	To let the computer play against itself

BEFORE ACTION BEGINS USE:

SELECT key	To select the number of stones for play.
START key	Player 1 has the first turn
OPTION key	Player 2 has the first turn

DURING THE GAME USE:

Joystick Controller	To position blinking cursor over a bin
Red Joystick button	Completes a move

ANYTIME USE:

SYSTEM RESET	Interrupt the game and begin again

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ATARI PROGRAM EXCHANGE

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1. Name and APX number of program _____

2. If you have problems using the program, please describe them here.

_____

_____

_____

3. What do you especially like about this program?

_____

_____

_____

4. What do you think the program's weaknesses are?

_____

_____

_____

5. How can the catalog description be more accurate and/or comprehensive?

_____

_____

6. On a scale of 1 to 10, 1 being "poor" and 10 being "excellent", please rate the following aspects of this program?

_____ Easy to use
_____ User-oriented (e.g., menus, prompts, clear language)
_____ Enjoyable
_____ Self-instructive
_____ Useful (non-game software)
_____ Imaginative graphics and sound

7. Describe any technical errors you found in the user instructions (please give page numbers).

8. What did you especially like about the user instructions?

9. What revisions or additions would improve these instructions?

10. On a scale of 1 to 10, 1 representing "poor" and 10 representing "excellent", how would you rate the user instructions and why?

11. Other comments about the software or user instructions:

STAMP

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